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ABSTRACT

The Extended School Services (ESS) program was established in 1990 as part of the Kentucky Education Reform Act. The program extends the school day, week, or year for students at risk of academic failure, providing them with additional instructional time to help them meet academic goals. An evaluation of ESS in 2001 utilized statewide surveys and site visits to 18 elementary, middle, and high schools. Findings indicated that ESS participation was fairly equal across schools, but varied at individual schools. Fewer females participated at the middle and secondary levels. Program participants were characterized by lower socioeconomic status. Generally, students were referred to ESS because of poor academic performance. Students' goals were heavily influenced by their teachers, yet they adopted the goals as their own. ESS classrooms engaged in student-led activities. Students received individualized instruction as needed and had the opportunity to have concepts not mastered retaught to them. All stakeholders agreed that the program helped students increase their academic achievement. Parents and students reported improved study skills and increased motivation to learn. Major program strengths included early targeting of students, dedicated staff, student transportation, collaboration between teachers and coordinators, flexible scheduling, low teacher-student ratios, and individualized instruction. Improvements could be made in areas of student transportation, staff development, expanded services in terms of hours and/or subjects, and a reduction of the student-teacher ratio, all of which require increased funding. Twelve recommendations are discussed. (TD)

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Evaluation of Kentucky's Extended School Services Program

ED 478 673

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TABLE OF CONTENTS

LIST OF TABLES ii

LIST OF FIGURES ii

INTRODUCTION 1
- Background 1
- Past Evaluations 1
- Current Evaluation 2

METHODS 5
- Statewide Surveys 5
- Training Session for Site Visits 5
- AEL CSIQ Administration 6
- Site Visits 7
  - Surveys 8
  - Interview Protocols 9
  - Classroom Observation Instruments 11
  - Other Instruments 13

FINDINGS 15
- Evaluation Topic One: Identification, Referral, and Assignment of Services 15
- Evaluation Topic Two: Profiles of Students Receiving Services 17
- Evaluation Topic Three: Profiles of ESS Programs and Their Implementation Patterns 19
- Evaluation Topic Four: Services to Students Placed at Risk 24
- Evaluation Topic Five: ESS Implementation Patterns and Outcomes 26

CONCLUSIONS 32
- Student Demographics 32
- Adherence to Intended Goals 32
- Classroom Instruction 33
- Student Outcomes 33
- Program Strengths 34
- Barriers to Maximum Success 34
- Program Fidelity 35
- Patterns of Implementation 36
- Overall 36

RECOMMENDATIONS 37

REFERENCES 39

LIST OF TABLES

1: Descriptive Information on School Sites Selected for Visits 4

2: Number of Site Visit Evaluation Survey Participants by Role Group 9

3: Number of Site Visit Evaluation Interview Respondents by Role Group 10

4: ICCM Implementation Score Correlations With School Variables 27

LIST OF FIGURES

1: Graphic Portrayal of the Evaluation of the Kentucky Extended School Services Program 3

2: Observation Data: Percent of Time Spent in Main Categories by ICCM Implementation Pattern 29

3: Mean AEL CSIQ Scale Scores by ICCM Implementation Pattern 31

INTRODUCTION

Background

The Extended School Services (ESS) program was established in 1990 as part of the Kentucky Education Reform Act (KERA). Designed specifically to address the needs of Kentucky's at-risk student population, ESS is an aggressive, proactive program for addressing academic problems before they become ingrained (Nesselrodt & Schaffer, 2000b). The ESS program extends the school day, week, or year for students at risk of academic failure, providing them with additional instructional time to help them meet academic goals. Rather than being an "add-on" or "stand-alone" program, ESS is designed to be an integral part of each school's regular academic program, thus ensuring that students receive instructional assistance in core content subjects in which they are performing poorly.

The major emphases of the statewide ESS program are to (1) sustain students' present level of performance to prevent them from falling behind; (2) provide extended programming for students who have been retained or are at risk of (a) being retained in a class or grade or (b) failing to graduate on time without assistance; and (3) close the achievement gap of low-performing students so they will perform successfully in the program appropriate to their age. According to publications from the Division of Extended Learning of the Kentucky Department of Education (KDE), nearly every school provides such services; thus, about 1,450 schools have some type of ESS program (AEL, 2001; Quality Education Data, 1998). See the Kentucky ESS Web site for more detailed information (http://www.kde.state.ky.us/osle/extend/ESS/default.asp).

Past Evaluations

Prior to this evaluation, three major within-state (internal) evaluations of the ESS program have been completed—one by the University of Kentucky in 1991, one by the KDE in 1993, and one by the Joint Center for the Study of Educational Policy at the University of Kentucky and the University of Louisville in 1998. In 1999, the Kentucky Commissioner of Education called for an external evaluation, i.e., by an agency(ies) outside of Kentucky. This evaluation was to be piloted in the spring of 2000 and conducted during the 2000-01 academic year (Nesselrodt & Schaffer, 2000b).

The KDE approved a plan submitted by Drs. Pamela Nesselrodt and Eugene Schaffer (of Dickinson College, Pennsylvania, and the University of Maryland, respectively), which focused on four major categories related to the ESS program: (1) identification, referral, and assignment of services; (2) profiles of students receiving services; (3) profiles of ESS programs; and (4) outcomes of the programs (Nesselrodt & Schaffer, 2000a). Nesselrodt and Schaffer completed a pilot-test evaluation of the ESS program in the spring of 2000 that resulted in two reports—one on the design, testing, and refinement of instruments and another on the refinement and finalization of research questions and methodology.

Current Evaluation

In the fall of 2001, KDE contracted with a partnership of AEL and Western Kentucky University for a comprehensive evaluation of the ESS program during the 2001-02 school year. All learnings from the pilot-test evaluation were incorporated into AEL's evaluation design. Fifteen evaluation questions were assembled into five major topics: (1) identification, referral, and assignment of services; (2) profiles of students receiving services; (3) profiles of ESS programs and their implementation patterns; (4) services to students placed at risk; and (5) ESS implementation patterns and outcomes.

AEL's evaluation of the ESS program utilized two major components—statewide surveys and site visits. These components were broken down into five main phases: statewide surveys, training session for site visits, fall/winter site visits, summer visits, and data analyses. The surveys were administered to the district and school ESS coordinators in the fall of 2001. See Figure 1 for a graphic portrayal of AEL's evaluation of the ESS program.

The major purposes for the site school visits in the fall/winter of 2001-02 and the summer of 2002 were to provide intensive, extensive ESS program data that would be generalizable, valid, and reliable to Kentucky programs statewide and to corroborate findings from the statewide surveys previously administered to district and school ESS coordinators. The site visits replicated most of the procedures and data collection instruments utilized in the pilot-test evaluation. A pair of trained data collectors made two to three day visits to a sample of 24 schools with ESS programs (18 during the fall/winter of 2001-02 and 6 in the summer of 2002) to collect both qualitative and quantitative data from a variety of ESS stakeholder groups.* See Table 1 for descriptive information about the sites selected for visits.

The site visit data collection involved classroom and ESS session observations; interviews with ESS teachers, ESS students, ESS parents, the school ESS coordinator, and the ESS district coordinator; surveys of non-ESS teachers, ESS teachers, ESS students, and ESS parents; a school and program description form; and written documentation such as the school's consolidated plan and needs assessment, as well as descriptions/policies of the ESS program. AEL added two new instruments—the Innovation Component Configuration Map—to generate patterns of implementation across ESS programs, and the *AEL Continuous School Improvement Questionnaire*, to measure the extent to which a school faculty is committed to continuous improvement.

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*A two-stage sampling process was implemented to identify the 24 schools. In the first stage, KDE staff established a pool of 48 schools through a six-step process that reviewed student achievement data, percentage of students eligible for free or reduced-price meals, overall academic student index, ethnicity, school-level performance indicators such as novice-level readers and dropout rates, comparisons of subsets of student scores within schools, and geographic and demographic representations. AEL completed the second stage by securing Johnson locale codes (National Center for Education Statistics, 2001) and published enrollment figures (Quality Education Data, 1998) for each of the 48 schools. Using a combination of building level, geography, urbanicity, and enrollment, AEL staff selected the 18 schools for the fall/winter 2001-02 visits. AEL staff collaborated by telephone with KDE staff to identify which of the 18 schools would be revisited during the summer of 2002, based on geography, building level, and general representativeness of Kentucky ESS programs.

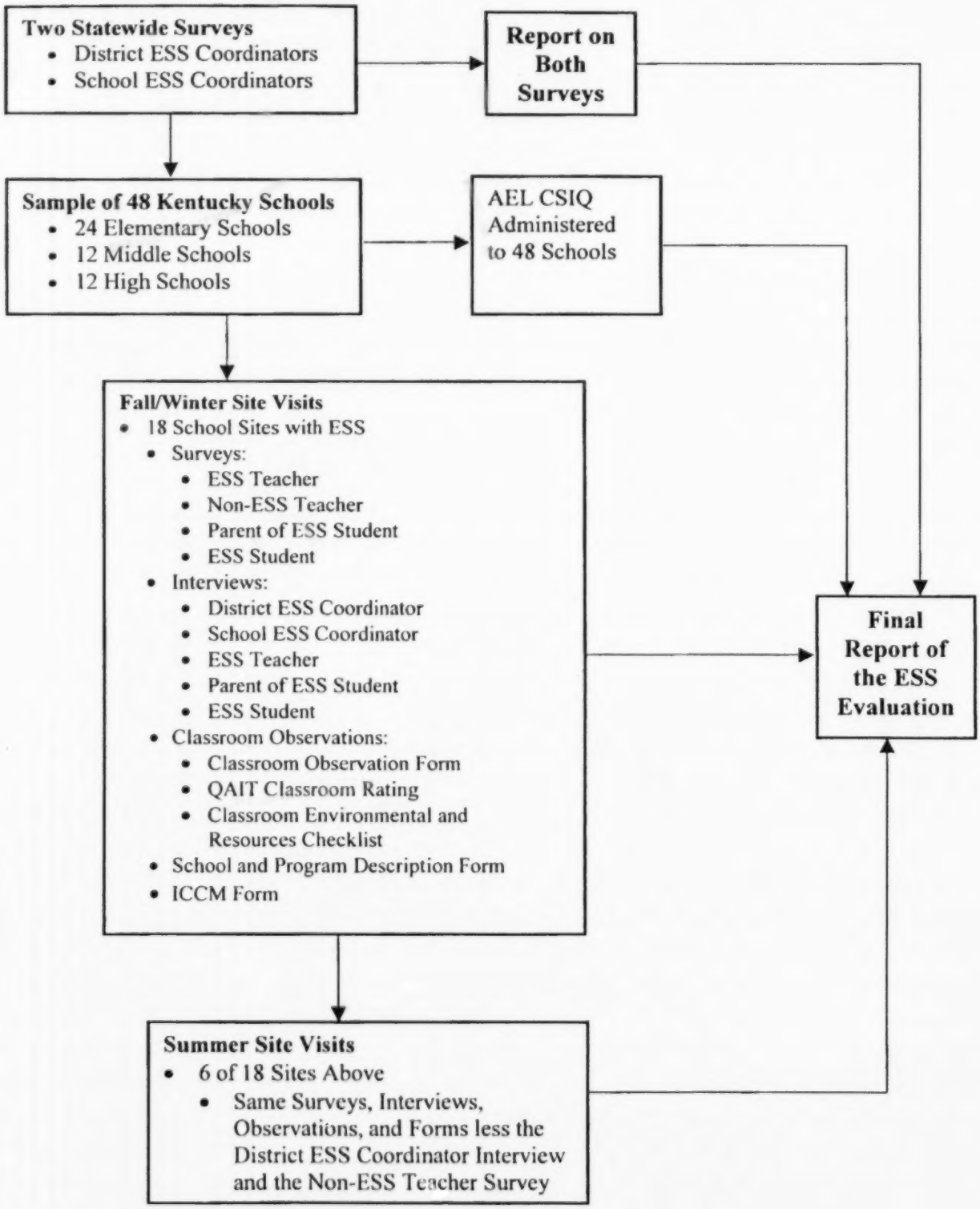
Two Statewide Surveys
• District ESS Coordinators
• School ESS Coordinators
Report on Both Surveys
Sample of 48 Kentucky Schools
• 24 Elementary Schools
• 12 Middle Schools
• 12 High Schools
AEL CSIQ Administered to 48 Schools
Fall/Winter Site Visits
• 18 School Sites with ESS
• Surveys:
• ESS Teacher
• Non-ESS Teacher
• Parent of ESS Student
• ESS Student
• Interviews:
• District ESS Coordinator
• School ESS Coordinator
• ESS Teacher
• Parent of ESS Student
• ESS Student
• Classroom Observations:
• Classroom Observation Form
• QAIT Classroom Rating
• Classroom Environmental and Resources Checklist
• School and Program Description Form
• ICCM Form
Final Report of the ESS Evaluation
Summer Site Visits
• 6 of 18 Sites Above
• Same Surveys, Interviews, Observations, and Forms less the District ESS Coordinator Interview and the Non-ESS Teacher Survey

Figure 1: Graphic Portrayal of the Evaluation of the Kentucky Extended School Services Program

Table 1: Descriptive Information on School Sites Selected for Visits

School Number	Achievement Gap	Visit Time	Grades [a]	Rounded Enrollment [a]	Attendance Rate [a]	Free/Reduced Lunch (Title I) [b]	Student to Computer Ratio [a]	Locale Type [c]
1	Minimum	Fall and Summer	9-12	1,330	94.7%	17%	5.2:1	Mid-size City
2	Large	Fall and Summer	9-12	960	95.1%	31%	3.5:1	Large Town
3	Large	Fall	K-5	470	95.5%	42%	4.7:1	Large City
4	Minimum	Fall	9-12	1,550	96.0%	14%	4.6:1	Urban Fringe of Large City
5	Minimum	Fall and Summer	PK-6	270	94.1%	72%	6.0:1	Rural, outside MSA
6	Large	Fall	3-8	370	94.6%	39%	4.0:1	Small Town
7	Minimum	Fall	K-6[†]	300	96.2%	27%	3.3:1	Rural, outside MSA
8	Large	Fall	K-5[†]	640	96.0%	31%	3.9:1	Large Town
9	Large	Fall	9-12	1,550	92.8%	15%	3.0:1	Mid-size City
10	Minimum	Fall and Summer	9-12[†]	950	96.4%	54%	5.0:1	Small Town
11	Large	Fall	9-12[†]	1,760	89.0%	16%	5.0:1	Mid-size City
12	Minimum	Fall	6-8	420	94.6%	50%	3.9:1	Small Town
13	Large	Fall	6-8	700	94.2%	16%	5.0:1	Urban Fringe of Large City
14	Minimum	Fall	K-5[†]	390	95.7%	42%	5.1:1	Small Town
15	Minimum	Fall and Summer	6-8[†]	700	94.5%	18%	4.2:1	Rural, inside MSA
16	Minimum	Fall	7-8	450	94.1%	38%	5.1:1	Rural, outside MSA
17	Large	Fall and Summer	K-5[†]	540	95.5%	47%	4.0:1	Small Town
18	Large	Fall	6-8[†]	750	95.7%	15%	6.0:1	Urban Fringe of Large City

[a] From "School Report Cards," by Kentucky Department of Education, 2002, Retrieved June 2, 2003, from Kentucky Department of Education website: http://aaps.kde.state.ky.us/report_card/

[b & †] From *QED 2001-2002 State School Guides: Kentucky (19th ed.)*, by Quality Education Data, 2001, Denver, CO: Quality Education Data. Copyright 2001 by Quality Education Data.

[c] From Public Elementary/Secondary School Universe Data in *Common Core of Data*, by National Center for Education Statistics, 2002, Washington DC: Author. Available from http://www.nces.ed.gov/ccd/pubschuniv.asp

[d] MSA – Metropolitan Statistical Area.

METHODS

The first task for this comprehensive evaluation was to convert all of the instruments used in the Nesselrodt and Schaffer pilot test (2000a, 2000b) to a machine-scannable format (excluding the interview protocols) and to make improvements based on lessons learned from the pilot test and suggestions from KDE staff. These instruments included six surveys (district coordinator, school coordinator, ESS teacher, non-ESS teacher, ESS student, and parent of ESS student); five interview protocols (district coordinator, school coordinator, ESS teacher, ESS student, and parent of ESS student); the Special Strategies Observation System (SSOS), which included three forms related to classroom observation, quality of instruction, and environmental resources of the classroom; and a school and program description form. AEL staff also selected and prepared in scannable format two other data collection instruments. First was the AEL Continuous School Improvement Questionnaire (AEL CSIQ). Second was the Innovation Component Configuration Map for Extended School Services (ICCM). This first task was completed by August 2001 and all instruments were submitted to the AEL Institutional Review Board (IRB) for approval. A few minor changes were made in response to IRB suggestions and all instruments were approved for use in the evaluation.

Statewide Surveys

For a complete report on the instrumentation, data collection and analysis, and findings for the statewide coordinator surveys, see *Perceptions of Kentucky's Extended School Services Program by District and School Coordinators* (Cowley & Meehan, 2001).

Training Session for Site Visits

An experienced data collector was identified to conduct the training session for site visits. This consultant was hired in September and was especially instrumental in helping revise the SSOS instruments. With the data collection instruments approved for use and a trainer on board, the next steps turned to designing the training session, developing the training manual, and hiring data collectors. Data collectors included six AEL staff, four experienced Kentucky educators/consultants, and two West Virginia consultants.

A training manual was developed for data collectors to use during and after the training session. This manual contained copies of each instrument to be used in the evaluation along with instructions for administration. It also included an agenda, a participant list, an overview of the ESS project and evaluation, sections for each of the major types of data collection, procedural information (random selection information, student consent forms, site visit procedures, materials checklist), a calendar for scheduling site visits, and an evaluation form for the training session. An e-mail listserv was developed so that data collectors could interact quickly and easily with one another and with AEL evaluation staff during the evaluation project.

The training session took place on October 3-5, 2001. Twelve individuals completed the three-day training. The bulk of the training time was devoted to the three instruments in the SSOS. Discussion of codes, practice with classroom videotapes, and instructions proceeded on schedule. One important aspect of the training was the inclusion of actual practice observations conducted in classrooms at a nearby high school. After each live classroom observation during the second and third days of training, a debriefing session was conducted to discuss coding questions and concerns. The training also dealt with other instruments such as interviews and surveys. The AEL director of evaluation conducted the sessions on the ICCM and AEL CSIQ.

Several wrap-up activities were completed at the conclusion of the training session. One was an evaluative activity in which participants coded a criterion tape of classroom behavior previously selected by the trainer, who reviewed each completed SSOS and verified that all participants met or exceeded the established level of competency in terms of coding specifications. A second wrap-up activity was making tentative pairings of data collectors and schools, based on interests, schedules, and geographical proximity. The third and final wrap-up activity was the completion of an evaluation form by all participants.

AEL CSIQ Administration

Instrumentation. The AEL Continuous School Improvement Questionnaire (AEL CSIQ) is a 60-item instrument that measures the extent to which a school's faculty members are committed to continuous improvement. The 60 items are each rated on a Likert-type scale of 1 to 6 (*Not present* to *Present to a high degree*). These items comprise six scales: (1) learning culture, (2) school/family/community connections, (3) shared leadership, (4) shared goals for learning, (5) purposeful student assessment, and (6) effective teaching. This instrument was used to discern the connection between faculty members' commitment to continuous improvement and implementation of their ESS programs.

Data collection. During the second week of October, AEL staff drafted a letter for the Kentucky Commissioner of Education's signature, soliciting cooperation from the 48 schools in this step of the evaluation. AEL staff then assembled kits containing the cover letter, the instruments, and a postage-paid return envelope; these kits were mailed on October 15. AEL staff called all non-responding schools and spoke with the principal or school coordinator to solicit information regarding the status of the instrument completion. In late January, KDE staff contacted the few remaining schools. By the end of February, 47 of the 48 schools had returned completed forms, for a return rate of 98%.

Data analysis. AEL staff scanned the surveys using Remark optical scanning software, cleaned the data files, and exported them to a standard software program (SPSS) for statistical analyses. Analysis was conducted at the scale level, and appropriate descriptive statistics were generated. Analyses were generated for each individual school and for aggregated building-level profiles for elementary, middle, and high schools. AEL CSIQ data also were analyzed to determine whether significant differences existed by ESS implementation patterns. Descriptive

statistics and one-way Analysis of Variance (ANOVAs) were utilized at the scale level for this analysis.*

Validity and reliability. The validity and stability reliability of this instrument was established in prior research conducted by AEL staff (Meehan, Cowley, Craig, Balow, & Childers, 2002). As a measure of the internal consistency reliability of the instrument for this administration, Cronbach alpha values were computed for the 10 items within each of the six scales, as well as for all of the items in the instrument. For this set of scores, alpha values ranged from .89 for the learning culture scale to .94 for effective teaching; the overall value for all items was .98.

Site Visits

To begin the process of site visits, AEL staff drafted another letter for the Commissioner's signature, announcing to the 18 schools (6 elementary, 6 middle, and 6 high schools) that they had been selected. KDE staff mailed the letters on October 26, 2001, and data collectors began contacting schools to schedule their site visits. By the second week of November, all of the visits were scheduled for completion at the end of February 2002; most data collection teams were scheduled for three site visits. Of the original 18 schools selected for the fall/winter site visits, one was eventually replaced with an alternate due to a scheduling conflict.

On April 25, a conference call involving AEL and KDE staff was held to select the summer site visit schools and two alternates. The decision was made to revisit 6 of the original 18 schools (2 elementary, 1 middle, and 3 high schools). Such a strategy would provide data from the schools' regular after-school ESS programs and their summer programs. KDE staff contacted an administrator at each school and secured their participation.

All six visits were conducted during June 2002. In terms of methodology, the only differences in the summer site visits were the exclusion of the non-ESS teacher survey, the decision not to re-interview the district administrator, an increase in the targeted number of parent and student interviews, and an increase in the number of ESS students observed. As well, a few of the interview questions for parents, students, ESS teachers, and school coordinators were eliminated because they were not relevant to the summer programs.

At the conclusion of each site visit, data collectors returned materials to AEL. Each set of school materials was logged in and checked for completeness. Data collectors were notified of any missing materials; completed materials were filed and stored by school. All signed consent forms were sent to AEL's Administrative Services Office for archival purposes. Interview notes were submitted to AEL support staff for typing before qualitative analysis began.

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*Random sampling was not utilized in this evaluation, given the original sample pool of 48 schools provided by KDE. Therefore the assumption for the use of ANOVAs and *t* tests does not apply in a classical sense. However, they are informative for comparing within-group variance to between-group variance for some of the measures used in this evaluation.

The following sections describe the instrumentation, data collection, data analysis, and reliability information for each of the four major techniques utilized during the site visits: surveys, interview protocols, classroom observations, and other instruments.

Surveys

Instrumentation. Four survey instruments were developed, tested, and utilized in the ESS pilot test and employed during the site visits of this evaluation. The four target groups included ESS teachers, non-ESS teachers, ESS students, and parents of ESS students. Each survey is briefly described below.

- *ESS teacher:* This survey contained 24 questions. The initial 18 items were selected-response and focused on demographics, attributes of the ESS program, recruitment procedures, teacher hiring and staff development, communication strategies, major outcomes, forces that help or hinder implementation, and overall effectiveness of the program. Six open-ended items asked for information related to strengths, weaknesses, and recommendations for improvements. This survey was administered at school to the full population of ESS teachers.

- *Non-ESS teacher:* This survey contained 19 questions: 13 selected-response and 6 open-ended items, all similar to those on the ESS teacher survey. This survey was administered at school to the full population of teachers not engaged in the ESS program.

- *Parent of ESS student:* This survey contained 11 questions. The initial 7 items were selected-response and focused on their children's performance in ESS. Four open-ended items focused on best features or problems of the program and an explanation of why their children would or would not participate the following year. This survey was administered to parents of all students participating in the ESS program who had returned a signed parental consent form. One copy of the survey was sent home with the student and was completed by one parent individually or by both collaboratively.

- *ESS student:* This survey contained 16 questions. Thirteen of the items were selected-response and focused on demographics, subjects studied in ESS, and a series of questions about academic behaviors and attitudes with which students agreed or disagreed. Three open-ended items focused on what students liked best about the ESS program and what changes should be made to the program. This survey was administered at school to all students participating in the ESS program who had returned a signed parental consent form authorizing their participation in evaluation activities.

Data collection. During each site visit, the data collectors worked with the school coordinator to administer the four surveys. Surveys were generally distributed during the first day of the visit, and returned by the last day. There was wide variance among the participation rate of students, due to the fluctuating percentages of signed consent forms.

Data analyses. After all of the fall/winter site visits were completed, AEL staff designed data entry templates using Remark optical scanning software. Surveys were scanned and then exported to SPSS for statistical analysis, including descriptive statistics. Comments were typed into the SPSS data files. Summer site visit data were scanned as they became available. Individual school files were merged into one master file by type of survey before analyses began. A breakdown of the number of surveys completed during the fall/winter and summer site visits is provided in Table 2.

Table 2: Number of Site Visit Evaluation Survey Respondents by Role Group

Group	Fall/Winter 2001-02	Summer 2002	Totals
ESS teachers	175	50	225
Non-ESS teachers	297	NA	297
ESS students	775	445	1,220
Parents of ESS students	360	216	576
Totals	1,607	711	2,318

Validity and reliability. These surveys were developed, tested, and utilized in the pilot test by Nesselrodt and Schaffer (2000a, 2000b). The instruments possess face and content validity and have proven their utility in a prior administration. To assess the degree of internal consistency reliability, Cronbach alpha coefficients were computed for this administration of the selected-response items on the four surveys, excluding demographic-type items and, for the parent survey, one particular multiple-response item. This administration of the ESS teacher survey resulted in a coefficient of .60; the non-ESS teacher survey, a .53; the parent survey, a .53; and the student survey, a .70.

Interview Protocols

Instrumentation. Five interview protocols were developed, tested, and utilized in the pilot test and employed in this evaluation. The five target groups included district administrators (coordinators), school administrators (coordinators), ESS teachers, ESS students, and parents of ESS students. Each protocol is described briefly below.

- *District and school coordinators:* These protocols each contained 20 questions and focused on aspects such as the history of ESS programs in the district/school; a description of the services provided under the current program; how students are identified and referred to the program; recruitment and staff development for administrators and teachers; communication among teaching staff, students, and parents; processes for setting goals and monitoring student progress; and assessment and exit procedures.

- *ESS teacher:* This protocol contained 16 questions and focused on aspects such as a description of the current ESS program, recruitment and staff development practices,

communications with students and parents, curriculum and methodologies used in regular and ESS classrooms, and major strengths and weaknesses of the current ESS program.

- *Parent of ESS student:* This interview protocol contained 11 questions and focused on perceived effectiveness of the program, areas of potential change, and perceived growth or success of their children.

- *ESS student:* This protocol contained 6 main questions, with multiple sub-items within 4 of the main questions and focused on perceived effectiveness of the program, areas of potential change, and perceived growth or success.

Data collection. Arrangements were made to interview the district coordinator at either the district office or the school during each site visit. With the exception of students, all interviews were conducted on an individual basis. Extensive interview notes were taken, which were later transcribed for analysis purposes. Students, parents, and teachers were randomly selected for interviewing. For students, a random selection was made using the signed parental consent forms received by the school coordinator.

Data analyses. By the end of the summer site visits, all interviews had been completed. A breakdown of the number of interviews completed during the fall/winter and summer site visits is provided in Table 3. Typed interview responses were analyzed by questions, first for categories then for emergent themes. Next, data displays were developed for each question.

Table 3: Number of Site Visit Evaluation Interview Participants by Role Group

Group	Fall/Winter 2001-02	Summer 2002	Totals
District coordinators	15*	0	15
School coordinators	17**	6	23
ESS teachers	72	26	98
ESS students	74	35	109
Parents of ESS students	36	13	49
Totals	214	80	294

*Three of the district coordinators had two schools within the 18 schools selected for site visits.
**One of the school coordinators was unavailable due to an injury suffered the day before the site visit.

Validity and reliability. These protocols were developed, tested, and utilized in the pilot test by Nesselrodt and Schaffer (2000a, 2000b). These protocols possess face and content validity and have proven their utility in a prior administration. For reliability, interviewers' use of protocols at the training session and during the site visits established a satisfactory level of agreement.

Classroom Observation Instruments

Instrumentation. For the collection of regular classroom and ESS session data, three instruments were selected and employed in the pilot test and used in this evaluation. All three were developed and employed in prior research and evaluation studies, refined by AEL and KDE staff, and converted to a scannable format. The three instruments comprise the Special Strategies Observation System (SSOS), which is designed for use in a variety of settings to systematically collect data on essential elements of classroom behavior related to instruction, management, and context. The SSOS is a viable instrument for school effectiveness research due to its strong grounding in the current literature on effective teaching and its utilization of a variety of methodologies. This combination of instruments generates low-, moderate-, and high-inference data; this triangulation of information further documents the veracity of the data collected. Each instrument that makes up the SSOS is described below.

- *Classroom Observation Form (COF):* The COF is a combination observation system that is best described as a category system, with low inference items, and includes multiple coding procedures (Nesselrodt & Schaffer, 1993; Sullivan & Meehan, 1983). It is based on the Classroom Activity Record designed by Everston and Burry (1989) and the Stallings Observation System (Stallings, 1980). The top page of the COF collects typical demographic information, such as the school, observer, date, number of adults and students in class, subject being observed, and type of class (ESS or regular). The observations occur over 56 minutes, during which the observer switches between coding the entire classroom and focusing on a single student previously selected. Each of seven pages corresponds to eight minutes of class time. The first minute per page—the "snapshot"—looks at student engagement (i.e., the number of students on task, off task, out of the room, or waiting) and grouping strategies (i.e., whether clustered in teacher, aide, or student groups and type of involvement, such as working alone, management, interaction, or socialization). The remaining seven minutes per page focus specifically on the target student, and include coding one of 27 discrete activities for each minute.

- *QAIT assessment of classroom:* This instrument is best described as a moderate and high-inference, simple coding, rating device. QAIT stands for Quality of Instruction, Appropriate Level of Instruction, Incentive, and Use of Time. Fitting on two sheets, it contains 40 items grouped under the four major categories. Each item uses a Likert-type rating scale of 1 to 5 (*Unlike this class* to *Like this class*). This instrument was to be completed at the end of each observation session.

- *Classroom environment and resources:* The Classroom Environment and Resources Checklist (CERC) is a low-inference, simple coding, sign system. Printed on the front of one sheet, it contains 12 classroom attributes that are coded either as present or not present, such as adequate lighting, use of multi-racial materials, posted assignments, etc. Next, 18 classroom resource items, such as textbooks, computers, and worksheets are listed; observers indicate whether such resources are visible or not. If they are, observers indicate whether they are used during the observation. This instrument also was to be completed at the end of each observation session.

Data collection. Data collectors utilized these forms during the school site visits. The classroom observation segments were completed during the observation; QAIT and CERC forms were completed as soon after the observation as feasible. Only ESS observations were completed during the summer visits, as regular school was not in session.

Data analyses. After the fall/winter site visits were completed, AEL staff designed data entry templates using Remark scanning software. SSOS data were scanned by school; data files were then cleaned and exported to SPSS for statistical analyses. School files were merged into one master file before analyses began. A total of 193 student observations was completed during the fall/winter school visits and 20 were completed during the summer visits for a grand total of 213 observations.

Classroom observation data were averaged across the number of eight-minute intervals per each observation. Percentages of time for the classroom snapshots and target student activities were calculated for both the regular classroom and ESS sessions. Data were analyzed using the 27 individual categories and by grouping these into four main categories: teacher-led, student-led, management/organization, and off-task. Student engagement data and time spent by the target student in the four main instructional categories also were analyzed by ESS implementation patterns.

QAIT data were analyzed by creating four main subscales composed of the 40 individual items. Descriptive statistics were used to describe results for both regular classrooms and ESS sessions. Further, independent *t* tests were conducted to determine if a statistically significant difference existed between the two types of classes for each of four categories: quality of instruction, appropriate level of instruction, incentive, and use of time.

CERC data were analyzed by calculating frequency percentages showing whether the classroom attributes were present in the regular classroom and ESS sessions. As well, frequency percentages were calculated to show whether various classroom resources were visible and used during the observations.

Validity and reliability. These instruments were tested and utilized in the pilot test by Nesselrodt and Schaffer (2000a, 2000b). Thus, these instruments possess face and content validity and have proven their utility in prior research. A high degree of inter-rater reliability was achieved among the data collectors, given that every participant passed at or above the 85% criterion of the COF coding assessment held at the conclusion of the training session. To assess the degree of internal consistency reliability, Cronbach alpha coefficients were computed for this administration of the COF and QAIT instruments, excluding demographic-type items; this procedure was not appropriate for the CERC instrument, given its lack of variance in response options of either selected or not selected. For the COF instrument, this administration of the grouping strategy items resulted in a coefficient of .54; for the student engagement items, a .82. For the QAIT instrument, this administration of all items resulted in a coefficient of .94; by subscale, the coefficients were .91 for quality of instruction, .74 for appropriate level of instruction, .88 for incentives, and .80 for use of time.

Other Instruments

Instrumentation. The School and Program Description Form was used in the pilot test and then refined by KDE and AEL staff for use in this evaluation. The form is machine scannable and fits on one sheet. It contains 15 items, 13 of which are demographic in nature, i.e., school characteristics, student enrollment, number of students and teachers involved in the ESS program, hours of operation, etc. The two open-ended items ask for a description of the major components of the ESS program and any unique characteristics of the school or community.

The Innovation Component Configuration Map for Extended School Services (ICCM) was developed by the Kentucky Institute for Education Research (KIER, n.d.) in the mid-1990s. The ICCM is based on the Concerns-Based Adoption Model (CBAM) originated and developed by Gene Hall, Shirley Hord, and others (Hall & Hord, 1987; Hord, Rutherford, Huling-Austin, & Hall, 1987). Basically, the ICCM is a map depicting the 15 major components of the ESS program in the three broad areas of student eligibility, school level program design, and district-wide ESS program planning. For each major component, there are three or four possible implementation variations (coded as 1 to 3 or 4, as appropriate), which were summed to create a total implementation score. The appropriate implementation levels for each component are determined through an analysis of all relevant data gathered during the site visit. When completed, a picture of the ESS component configurations was established based on the implementation scores. When the ICCMs for all the site visits were completed, then a study of their various patterns of implementation was conducted; patterns were then used in conjunction with other variables to determine whether statistically significant differences occurred among the identified implementation patterns.

Data collection. The School and Program Description Forms were to be completed and gathered during each of the 24 site visits. However, only 22 of these forms were returned to AEL for analysis. An ICCM form was completed by the data collectors for each school site visit and returned to AEL.

Data analyses. A data entry template was developed for each instrument using Remark scanning software. After the instruments were scanned, the files were cleaned and then exported to SPSS for analysis. Descriptive statistics were generated for the School and Program Description Form items; the two open-ended items were qualitatively analyzed by common themes. Descriptive statistics were generated for the 15 ESS components on the ICCM. Further, AEL staff met to visually examine the ICCMs to detect patterns of implementation. Based on this discussion, the only patterns emerging were based on the summed score for each school, which could range from 15 to 47 (the greater the score, the greater the degree of implementation). These patterns were used to correlate with a number of other school-level variables, including proficiency and accountability levels, attendance and retention rates, number of parent volunteer hours, average years of teaching experience, expenditures per student, and number of drug/weapon/assault incidents. These patterns also were used to determine statistically significant differences for student engagement and instructional activity categories from the SSOS, selected key items from ESS coordinator and teacher surveys, and the AEL CSIQ scales.

Validity and reliability. The School and Program Description Form was developed, tested, and utilized in the pilot test by Nesselrodt and Schaffer (2000a, 2000b). The ICCM is based on solid research endeavors such as the Concerns-Based Adoption Model. Thus, these instruments possess face and content validity and have proven their utility in a prior administration. To assess the degree of internal consistency reliability, Cronbach alpha coefficients were computed for this administration of the ICCM; this procedure was not appropriate for the School and Program Description Form, given its strictly descriptive nature. This administration of all items in the ICCM instrument resulted in a coefficient of .82; by the three broad areas, the coefficients were .78 for student eligibility, .74 for school-level program design, and .44 for district-wide ESS program planning.

FINDINGS

Findings are presented as comprehensive summaries of data points that are directly aligned with the five broad evaluation topics and their related subquestions.

Evaluation Topic One: Identification, Referral, and Assignment of Services

a. Why do students participate in ESS?

Nearly all (95%) of the 151 district coordinators who responded to the district coordinator survey indicated that most students were referred to the program because they were in danger of failing and needed to improve their academic performance. In addition, 90% of the district coordinators interviewed (n = 18) indicated that the program was intended to help students succeed, or improve academically. In addition, 73% or more of both ESS (n = 225) and non-ESS (n = 297) teachers surveyed indicated that their students received ESS services to improve academic achievement and because their students were in danger of failing. Additional reasons that students received ESS services included because they were in danger of dropping out, needed extended learning time, needed to sustain present levels of performance, and needed to improve self-esteem. Thus, student performance and success in school were clearly the primary reasons that students received ESS services.

Interviews with parents of students participating in ESS confirmed this finding, given that 22% of the 49 parents who were interviewed indicated that their children were participating in the program because they needed to improve their grades in a specific subject and 7% needed to improve their grades in general. Sixteen percent of parents cited the students' need for additional help, 9% attributed enrollment to getting caught up on homework, 7% needed help staying on task, and 30% indicated a variety of reasons (including falling behind in schoolwork, having to make up tests, because the child wanted to participate, and supplemental reasons). Overall, parents perceived the reasons for their children's participation in ESS to be to improve student performance and decrease risk of failure.

In addition, 19% of the ESS students interviewed indicated that they were participating in ESS because they needed to do better in school (7%), had failed a class (5%), needed to improve a specific grade (4%), or needed to graduate (3%). Nearly one third (31%) of these students participated because they volunteered, indicating a desire to improve grades, get extra help, or simply wanting to come to the program as specific reasons for their participation.

b. How are students referred for ESS services and by whom?

According to 87% of the 225 ESS teachers surveyed, teacher recommendations were a basis for selecting students for participation in ESS. Other means of selecting students for ESS included parent requests (56%), student requests (45%), standardized test scores (9%), and other (10%). Similarly, 82% of the non-ESS teachers surveyed indicated that selection was based on teacher recommendations, 44% indicated that it was based on parent requests, 33% chose student

requests, 9% chose standardized test scores, and 8% selected other. Responses to the parent questionnaire paralleled these data, with 53% indicating teacher recommendation, 32% indicating student self-referral, and 29% indicating that parents referred the students.

ESS teachers' (n = 98) interview responses to the question about student selection were generally consistent with responses on their surveys. Thus, 24% of ESS teachers stated that teacher recommendations were used to identify students, 3% stated that school counselors selected students, and 2% stated that administrators referred students to the program. In addition, 16% of the ESS teachers responded that struggling learners were identified as needing ESS, 8% stated that test scores were used to identify students in need of ESS, and 18% and 14% of ESS teachers said selection was based on parents referrals or requests and students' self-referrals, respectively.

Thirty-one percent of school ESS coordinators who were interviewed (n = 23) said that referrals were made by teachers, 20% said they were made by parents, 10% said they were made by students, and 22% stated that eligibility was based on a variety of things including need and recommendations from professional school staff. Further, 25% of the 18 district ESS coordinators who were interviewed indicated that eligibility for ESS was determined by following district guidelines. In addition, 8% of the district level ESS coordinators interviewed said that the decisions regarding eligibility were made at the school level. Finally, when asked if there was a formal method of referral, 40% of the district level ESS coordinators interviewed indicated that teachers initiated referrals to which parents later consented, 10% said that community awareness was sought through advertising, and 10% indicated that other various methods were used (e.g., computer databases).

c. Once the referral has taken place, how are individual student goals determined?

Establishing individual students' goals for the program appeared to rely heavily on parents and teachers, with some student participation. According to 30% of school ESS coordinators who were interviewed, the regular or classroom teacher, who was often also the referring teacher, determined the goals for students when he/she identified the students' needs or reasons for referral. Another 12% of the coordinators said that the regular and ESS teacher set the goals together, and 6% of the coordinators said that the goals were stated on the referral forms. Only 24% of the ESS school coordinators said that students were involved in setting the goals for their participation, with 12% involving the regular teacher and student working together, 6% involving the students and ESS teacher working together, and 6% involving the students working alone. Moreover, although parents weren't identified by the ESS coordinators as being part of the goal-setting process, 58% of the parents who were interviewed stated that they were indeed part of this process via collaboration with a teacher, as part of planning for college, by closely monitoring their children's progress in school, and by working with their child at home.

Regardless of the apparent lack of participation of students in the goal-setting process, only 35% of the ESS students interviewed said that they participated in ESS because someone else wanted them to do so. Thus, 17% of the students stated that their teachers suggested their involvement in ESS, and 18% indicated that one or both parents had encouraged it. Overall, it

seemed that students' goals were heavily influenced by their parents and/or teachers but 65% of the students apparently accepted these goals as their own and/or understood why they were expected to benefit from ESS.

Evaluation Topic Two: Profiles of Students Receiving Services

a. What are the grade levels of students receiving ESS?

ESS students in the sample schools were asked to provide information about their grade levels. A total of 1,195 students replied to this query on the student survey. Nearly half (48%) of those responding indicated that they were in the high school grades: 5% in 9th, 14% in 10th, another 14% in 11th, and 15% in 12th. ESS students in the elementary grades constituted the next largest group (28%), with 3% in 1st, 6% in 2nd, 7% in 3rd, 6% in 4th, and another 6% in 5th. Slightly fewer (25%) were in middle grades: 10% in 6th grade, 8% in 7th, and 7% in 8th. It is interesting to note the increases in ESS students in the 6th grade and in the 10th grade; these increases perhaps indicate that students transitioning from the elementary and junior high schools may require the additional academic support offered via ESS.

While nearly half of the students who returned surveys were at the high school level, this does not imply that more high school youth were participating in ESS sessions, but rather reflects the larger size of the high schools; further, half of the summer visits were conducted at the high school level. When comparing the percentage of ESS students at a school to the total student enrollment, overall building-level percentages were similar for elementary, middle, and high schools—from 16% to 19% for all three levels.

b. What subgroups (gender, race, etc.) are represented by students receiving ESS?

Gender data were available for students who completed the student survey in the sample school sites. Of the 1,163 students who responded to this demographic item, 52% (n = 603) were male and 48% (n = 560) were female.

When disaggregated by school level, it appeared that the percentages of boys and girls attending ESS programs in the sample sites remained fairly stable, with boys' participation increasing slightly at the middle school level. Boys constituted 49% of attendees in elementary schools, and girls, 51%. Middle school boys accounted for 53% of participants, and girls accounted for 47%. Likewise, 53% of ESS attendees were boys at the high school level, and 47% were girls.

Several interesting discrepancies were apparent at the grade levels, however. For instance, in the 1st grade, only 40% of students receiving ESS services at sample schools were boys. This overrepresentation of girls is anomalous. Dramatically, for example, 69% of ESS participants at the 9th grade level were boys, and only 31% were girls. (It should be noted that the numbers of students in these two grades are smaller than the numbers in the other grades represented.) Boys were also represented more than girls in ESS programs at sample sites in the 7th (54%), 8th (57%), and 10th (54%) grades.

c. What are the achievement levels, as measured by grades and proficiency levels, of the students receiving ESS?

According to 95% of the 151 district coordinators who replied to the survey mailed to all Kentucky district coordinators, most students were referred to the program because they were in danger of failing. Ninety-five percent also reported that a common reason why students were recommended for ESS was to improve their academic performance.

On the other hand, of the 837 school ESS coordinators who returned their surveys, only 76% indicated that students were referred to the program because they were in danger of failing. This represents a difference of 19 percentage points between the reports of district and school coordinators. Nonetheless, school coordinators (92%) tended to report, similarly to district coordinators, that students were recommended to the program to improve their academic performance.

Data gathered during site visits suggested that students referred to ESS were at some risk for failure, but not to the degree suggested by respondents to the district and school coordinator surveys. Of the 18 district coordinators interviewed during AEL site visits, for example, fewer than half (45%) reported that students in their districts were recommended for program participation because they were not succeeding academically. Similarly, only 43% of the 23 school coordinators interviewed during AEL site visits thought that students were referred to ESS because their performance was deficient (although an additional 6% reported that students were referred because they were not achieving to their potential).

Interestingly, ESS teachers interviewed during AEL site visits reported much more frequently that students were referred because they were struggling academically. ESS teachers were asked "What are the main problems the program is intended to solve? What are the main goals/purposes of the program in your district?" Of the 98 ESS teachers who replied to this question, 23% reported that the program was used to assist struggling learners, 13% to improve student performance, another 13% to prevent failure or attrition, 7% to improve performance in specific academic subjects, and 4% to improve test scores. ESS teachers, thus, provided a different perspective on ESS students' performance than did coordinators.

The 225 ESS teachers who completed an ESS teacher survey tended to corroborate this view of student performance. Asked to select from a list the most common reasons students receive ESS services, 84% indicated that they were to improve their academic achievement, and three fourths (75%) noted that students were in danger of failing. In addition, 11% reported that ESS students were in danger of dropping out of school.

Non-ESS teachers likewise thought that ESS students were referred to the program because they were performing poorly. Nearly three fourths (73%) of the total 297 non-ESS teachers responding to the survey reported that their students received ESS services because they were in danger of academic failure. Seventy-three percent also agreed that students were referred to ESS to improve their academic achievement.

d. What are the characteristics of students receiving ESS that put them at risk of dropping out of school—e.g., low achievement in school, poverty, single-parent homes, etc.?

Data from the School/Program Description Form revealed some characteristics that may put students at risk of dropping out of school. For instance, when asked to describe any unique characteristics of their community, school, or student population, respondents most frequently noted general issues such as socioeconomic status of students (16%) and rurality (16%); at a more specific level, respondents noted a high incidence of eligibility for free or reduced-price meals (13%) and diverse locales (10%).

Evaluation Topic Three: Profiles of ESS Programs and Their Implementation Patterns

a. What are the major components of the ESS program?

The major components of the Extended School Services program were identified by Kentucky educators in the mid-1990s as part of a research project completed by the Kentucky Institute for Education Research (KIER). Through a series of meetings, discussions, drafts, and reviews, KIER staff guided teams of Kentucky educators in developing of a series of "innovation component configuration maps" for all the major thrusts in the KERA law. Specifically, the component map developed for the ESS program was titled the Innovation Component Configuration Map for Extended School Services, or ICCM for short. The ICCM depicts the major components of the ESS program in the three broad areas of Student Eligibility, School-Level Program Design, and District-Wide ESS Programming Planning.

There were unequal numbers of major program components within the three broad areas named above. In the Student Eligibility area, the components included referral guidelines, student selection, entry and exit process, and student assessment for eligibility. In the School-Level Program Design area, the components included school transformation planning, scheduling, staff selection, staffing patterns, instructional practices in ESS programs, organizing and grouping students, and instructional resources. Finally, within the District-Wide ESS Program Planning area, the major components included collaborative planning processes, program evaluation, fiscal management, and linkages with other KERA strands and other supporting programs. In sum, then, there were 15 major components in the ESS program, as derived from prior KIER research.

Then, for each of the 15 major components of the ESS program, there was a series of possible implementation variations. There usually were three implementation variations for each component, but two components (instructional practices in ESS programs and program evaluation) had four possible variations. The component implementation variations were arranged from left to right on the page for each component and labeled as "Variation A" through "Variation C," except for the two "Variation Ds." These implementation variations were ordered from most ideal (Variation A) to least ideal (Variation D). The most ideal variation (A) was viewed by the ICCM developers as the implementation of that component that was the best that an ESS program could achieve. It follows, then, that the most ideal implementation of the ESS program would be one that was implementing all 15 major components at the "A" level. Of

course, in practical terms, it would be very difficult for any ESS program to achieve this high standard. To discover where schools in the state were with their implementation of the ESS major components, a variety of evaluation study data sources were inspected.

b. How does the implementation of the ESS program components vary by stakeholder groups?

During site visit interviews, district ESS coordinators were asked to describe their ESS services so as to solicit responses, of a general nature, about their implementation of the major components of the ESS program. Eighteen district ESS coordinators provided a total of 82 responses to the question. These 82 responses were grouped into 17 categories, with the number of responses in each category ranging from 15 to 2. Comparing the response categories to the ESS major components and their implementation variations showed that eight different response categories, including 36 (44%) of the total responses, were related to some variation or other of the scheduling component in the School-Level Program Design area. For example, summer school was named 12 times (15%) by the district ESS coordinators, followed by afternoon programs, Saturday school, a.m. and p.m. services, intersession/breaks, before school, night classes, and off campus. The single category with the second-largest number (10 or 12%) of responses was labeled "monitor budget," which relates most directly to variations of the fiscal management component in the District-Wide ESS Program Planning area.

Also during site visits, school ESS coordinators were asked the same question about ESS services. Their responses were placed into 13 categories, ranging from 20 to 3 percent of the replies. It is interesting to note that seven of those categories can be collapsed and related to variations of the instructional practices in ESS program components in the School-Level Program Design area. Totaling 63% of the school coordinators' responses, the seven categories were subject/content areas, remediation/skills help, tutorial help, test preparation, writing/portfolio, homework, and higher-order skills. Another 6% of the responses on computer lab access were variations of implementation in the instructional resources component in the same broad area.

During the fall/winter and summer visits to ESS programs, 98 ESS teachers were interviewed and asked several questions about the implementation of key elements in their schools. As expected, these questions related to variations of implementation of major components in the area of School-Level Program Design. When asked about time of day for their ESS program, 52% of the teachers replied after school, 26% said summer school, 11% said morning before school, 6% replied Saturday, 3% said evening hours, and the remaining 3% said the times were flexible. ESS teachers were asked to describe the staffing of their programs, which related to the staffing patterns component in the ICCM. Thirty percent of the teachers' responses fit into a category of elective/volunteer. The next highest category was miscellaneous, and contained 19% of the responses in a wide variety of statements. Teachers were asked to state the number of students per class, which also yielded information regarding the variations of the staffing patterns component. Thirty percent of the responses were in a category of 6-10 students to 1 teacher, 17% were in 2-5 to 1, 17% in 11-15 to 1, 15% in 4-30 to 1.

During the site visits, the ESS teachers were asked a pair of questions related to the instructional practices in ESS programs component. When asked about the curriculum of their ESS program, the teachers' responses fit into 10 categories, with responses ranging from 18% to 3% of the total. Interestingly, the top 3 categories tied with 18% of the responses and included everything, same as regular classroom; reading; and math. When asked to describe the key elements of the instructional methods of their ESS programs, teachers provided a wide variety of responses fitting into 18 categories with 28% to 1% of the total. At 28%, the category with the most responses was individualized instruction, which was followed by the category of small groups at 13%. Finally, the ESS teachers were asked to describe their adaptations to student's needs, which yielded variations of implementation for the organizing and grouping students component. Fully 35% of the teachers' responses fit into the category of individualized instruction. Another 16% were in a category labeled learner needs (but not individualized). Then, the two categories of miscellaneous and appropriate level materials tied with 10% each.

Also, as part of the site visit data collection, 49 parents of ESS students were interviewed. One question they were asked was "What are the best parts of ESS for your child?" The parents' responses to this question provided some additional stakeholder information about the variations of implementations of the major components in the ICCM. Almost one third (32%) of the parents' responses fit into a category labeled individual attention. At 15%, the second largest category dealt with the positive outcomes of the program on the academic standing of their children and was labeled improved academically. With 14% of the responses, the category of homework help was third largest, followed by the variety of activities in the ESS program at 10%; and miscellaneous, also at 10%.

During the 24 site visits to ESS programs, 109 students enrolled in the program were interviewed and asked several questions relating to the implementation variations of the major components. For example, related to the component of entry and exit process in the Student Eligibility area, students were asked how long they had been in ESS and what subjects they studied. Student responses to these two questions were often combined rather than separate, but four categories of responses were specific to the length of time in ESS. The category with the largest number of responses at 21% was called the first semester or first year. Then, 9% responded with second year. In the area of School-Level Program Design, students were asked if their ESS teacher was the same as their regular teacher. Fifty-six of the responses were in a category of not the same teacher, while 37% were in the same teacher category, and 5% said it was mixed (different for one subject, same for another). These different implementations relate to the staff selection and staffing patterns components in the ICCM.

ESS students were asked "What do you learn about in ESS?" The responses helped to describe the variations of instructional practices and instructional resources in the School-Level Program Design area. Student responses to this question were categorized into 15 groups, with a few more of those groups naming a subject and the others naming an instructional practice or resource. Finally, students in ESS programs were asked several interview questions related to variations of implementation in instructional practices, organizing and grouping students, and instructional resources used in ESS. Students were asked to describe what they did in their ESS classes that was different or the same as their regular classes. Only 10% of their responses fit into the same category and just 4% of their responses were in the mixed (different and same)

category. The remaining 86% of the responses were spread over 13 difference categories. Students were asked if the ESS teachers did anything special to teach them in ESS class that their regular teachers didn't and, if so, what. Student responses indicated that, indeed, ESS teachers did special things in ESS classes. More than three fourths of the responses (79%) were put into 10 categories of different, special things, including more individual help (34%). Students also were asked if their ESS teachers told them how well they were doing. Student responses were sorted into 10 categories, with six of them having 70% of yes/positive responses and the 29% remaining responses in four categories.

c. What are the patterns of implementation of the ESS components for the more effective ESS users and for the less effective ESS users?

The patterns of implementation of the ESS components were determined through an analysis of the ICCM forms completed by the data collection teams at the conclusion of the 24 site visits. There were 15 major ESS components on the ICCM; each had at least three possible variations (A-C) and two had four possible variations (A-D). For analysis purposes, each variation was assigned one point and the points per each completed ICCM were totaled. The total scores could range from a minimum of 15 to a maximum of 47; the higher the point value, the higher the level of ESS implementation toward the most ideal implementation of the most components. (Higher implementation scores often are called "high-fidelity implementations.")

Actual scores on the ICCM forms ranged from a low of 24 to a high of 45 on the 47-point maximum scale. There were 4 scores in the 40s, 15 in the 30s, and 5 in the 20s. To determine the patterns of implementation within these scores, the total implementation scores and the actual variation scores were examined simultaneously to discern similar groupings, or patterns. Four overlapping patterns of implementation emerged from this analysis: Pattern 1, scores of 24 to 31 ($n = 8$); Pattern 2, scores of 33 to 38 ($n = 7$); Pattern 3, scores of 39 ($n = 5$); and Pattern 4, scores of 40 to 45 ($n = 4$). Given the nature of these patterns, a traditional graphic "map" was not generated for this analysis.

The scores for Pattern 3 were very close to the scores for Pattern 4 and, likewise, the scores for some of Pattern 2 were close to the scores of Pattern 3. The distinguishing characteristic of the groups, then, rests in the details of the patterns of the implementations of the 15 major ESS components. Put another way, although the total implementation scores were close, the patterns of implementation of the various components differed. For example, Pattern 4 was the most effective—the ESS implementation with the most fidelity to the ICCM. Pattern 4 implemented all components at variation A or B except for a single school that had all A and B variations plus two components with a C variation. In Pattern 2, the second-most effective ESS user group, all schools had implementation patterns consisting of all A and B variations and just one C variation. The implementation of components for Pattern 3, next-to-lowest effective users, consisted of some A and B variations plus either two or three C variations. Last, Pattern 1, the least effective ESS users, had implementation patterns either of some A and B variations plus four or more C variations or some A, B, C, and D variations.

Another way to analyze the differences in the patterns of implementation of the ESS components was to look for differences within and across the two groups. That is, in addition to

the count of how many variations of each level each pattern had, an inspection was made of which variations were different both within and across Patterns 4 and 1. Within Pattern 4, all four ESS programs were judged to be at the B variation for the collaborative planning processes. Also within Pattern 4, three of the four programs were at variation B for the scheduling component. Within Pattern 1 (the lowest level of implemention), several trends were noted. For example, seven of the eight programs in Pattern 1 were judged to be at variations C or D for the program evaluation component. In fact, four of those were at variation D.

Next, seven of the eight Pattern 1 programs were at variation C for the staff selection component, six of the eight were at variation C for the instructional resources component, and six of the eight were at variation C for the linkages with KERA strands and other supporting programs. Still within Pattern 1, all eight of the programs were evenly split between either variation A or B for the scheduling component and, also, six of the eight programs were judged at variation B for the organizing and grouping students component. Finally, when inspecting which variations differed across Patterns 4 and 1, the most that can be said is that there were no outstanding differences evident. No important differences were evident when comparing the Pattern 4 ICCMs to the Pattern 1 ICCMs. Of course, the total scores were very different, but the patterns that produced those total scores tended to be similar. Stated differently, which components were judged to be most ideal (more points) in one pattern seemed to be the same in the other pattern and vice versa for components judged to be less ideal (fewer points).

To investigate further any possible differences across programs for Patterns 1 and 4, their School and Program Description Forms (SPDF) were reviewed. Unfortunately, one of the forms in Pattern 4 was missing (the school coordinator suffered an injury during the site visit and never submitted the completed form). The most interesting trend that emerged from the SPDF was that three of the four Pattern 4 schools were middle schools and the other was an elementary school. Also, for the three schools with completed forms, coordinators reported that students enrolled in the ESS program were just 9%, 10%, and 14% of the total school enrollment. For locale, two reported themselves suburban, and the other reported rural. They reported having six, eight, and nine ESS teachers—all of them also were regular classroom teachers. All were well-established programs, with two begun in 1990 and the other in 1994. The three Pattern 4 schools had after-school programs and just one school also offered weekend and summer programs. Two programs reported operating three days each week for about one hour each day. The other program reported operating five days a week for about four hours per day (this is the school that had the summer program). When describing the major components of their ESS programs and the current levels of implementation for each component, there were no trends appearing across the responses supplied by the three Pattern 4 schools, except that each offered some type of tutoring, remediation, or skills-building activities. Otherwise, the responses were rather idiosyncratic.

The eight Pattern 1 (low implementing) school SPDFs were reviewed for possible trends across this group. With eight schools in the pattern, the possibilities for confirming trends were lessened and this was borne out in their responses to items on the form. There were three high, two middle, and three elementary schools in Pattern 1. Four of these schools reported being in rural locales, three in urban locales, and one in a suburban locale. The total student enrollment varied widely, as did the percentages of ESS students out of the total enrollment. These figures

ranged from 6% to 36% (with missing data for two schools). Interestingly, although the number of ESS teachers ranged from 4 to 25, the number for six of the eight Pattern 1 schools was 9 or less. And, similar to Pattern 4, all ESS teachers were regular classroom teachers. Also similar to Pattern 4, most of the ESS programs were well established, with just two of the eight starting as recently as 1996 or 1997. Seven of the eight schools had after-school programs, while the other was a summer program. Four of the eight also offered before-school ESS programs, five offered summer programs (other than the one already named), and four offered intersessions.

To summarize the differences across the Pattern 4 (high implementers) and Pattern 1 (low implementers) SPDF sheets, the most interesting trends discovered were that three of the four Pattern 4 programs were in middle schools, and each of them had a rather small ESS program enrollment—ranging from 9% to 14% of the total school enrollment.

Evaluation Topic Four: Services to Students Placed at Risk

a. Are ESS programs serving students placed most at risk academically?

One method to determine whether ESS is serving students placed most at risk academically is to examine how students are referred to ESS. Permitting multiple "paths" to ESS increases the likelihood that all children in need of ESS services will be identified. Teacher recommendation was used in all districts as a selection method. In two thirds of the districts, parent requests also served as a route into ESS. In 45% of the districts, students could request ESS services. In a third of the districts, standardized test scores were used to determine ESS eligibility.

There are myriad reasons why a student might be considered at risk for failure, with the most obvious signal being poor performance in a subject. The main reasons students received ESS services were because they were in danger of failing (mentioned by 95% of district and 76% of school ESS coordinators), and/or needed to improve academic performance (noted by 95% of district and 92% of school ESS coordinators).

More than 88% of all teachers, school coordinators, and district coordinators who were surveyed reported increased academic achievement as a main outcome of the ESS program. Of the 576 parents who answered the survey item, 58% said that their children had improved understanding of the subject material, 36% reported that their children were passing the subject, and 22% remarked that their children were passing the grade as a result of participation in ESS.

b. Are ESS programs meeting the needs of students placed at risk academically?

Questions were asked in several of the data collection activities to answer this evaluation question. The 49 parents of ESS students who were interviewed during site visits were queried about their perceptions of ESS effectiveness. When asked how their children were doing in school since participating in ESS, more than half (54%) responded that their children's performance in school had improved, with comments such as "He has improved," and the child had "brought grades up." Seventeen percent of the parents believed that the instruction and

assistance their children received in ESS were helpful, saying, "They work better," and that the child was "able to do homework." The outcomes seemed not just related to specific content areas, but also included improved study skills or learning how to learn.

A wider cross section of parents of ESS students was administered surveys. One question asked parents how their children's performance in school had changed since they began participating in ESS. Parents were provided five answer choices, ranging from much better to much worse. Of the 565 parents who answered the question, 21% said they thought their children were performing much better in school since participating in ESS. More than half of the parents (57%) said their children were doing better in school.

When asked during interviews what they thought their children had gained from the ESS program, 23% of the 49 parents commented that their children were giving school more attention because school was giving the children more attention, i.e., one-on-one instruction and tutoring. Better grades were a noticeable outcome mentioned by 15% of the parents interviewed. Fourteen percent of parents had witnessed increased self-esteem in their children. Ten percent of the parents believed their children's participation in the ESS program had resulted in better homework skills ("She is better able to do her homework"); an additional 9% of parents had noticed their children having better general study skills and organizational skills.

Both ESS and non-ESS teachers were asked in the teacher surveys what the most important ESS outcomes were for students. The teachers could provide more than one response. Almost all (95% of the ESS and 89% of the non-ESS teachers) reported enhanced academic achievement. Two thirds (65%) of the ESS teachers observed increased motivation on the part of students; in comparison, 38% of the non-ESS teachers noted increased motivation as an outcome. Sixty percent of the ESS teachers and 29% of the non-ESS teachers indicated that students had better self-esteem because of participation in ESS.

District and school ESS coordinators were asked the same question about student outcomes. Almost all (99%) of the district coordinators stated enhanced academic achievement as an outcome of the program. Approximately two thirds (62%) of the district coordinators marked increased motivation as an outcome, and 48% reported increased student self-esteem. School coordinator responses were similar, with 98% noting enhanced academic achievement, 70% reporting increased student motivation, and 56% noting an increase in student self-esteem.

On the student survey was the statement, "I am a better student this year," to which students either agreed or disagreed. More than three fourths of the 1,201 students (78%) responded that they were better students this year. Eighty-five percent of students agreed that the ESS program was helping them this year, and 86% stated that they asked for help in ESS when they needed it. Finally, when asked if they liked school, 67% responded affirmatively.

One item on the parent survey asked parents to list the best features of the ESS program. The 461 parents who responded to this question provided a total of 522 discrete responses. Twenty-one percent of parents said that the best feature was the extra help the program provided to students. Helping students to better understand their schoolwork was a best feature noted by 15% of the parents surveyed.

Most of the 49 parents (72%) responded positively when asked during interviews if they thought their children's ESS teachers were helping the children to do their best. Parents made comments such as, "Teachers are wonderful," "ESS teachers do help her to do her best," and "[my child] speaks well of her." ESS students were also asked during interviews whether and how their ESS teachers might be different from their regular classroom teachers. Thirty-four percent of students interviewed stated that the teacher(s) provided more individualized assistance. Nineteen percent responded that there was no difference between teachers.

In the student survey was an item asking students what they liked best about the ESS program. The top five responses supported what students in interviews had said about their ESS teachers differing from their regular classroom teachers. Thirty-nine percent of students responded that they liked the tutoring and individualized instruction available in ESS. Fourteen percent appreciated having the extra learning time that ESS provides.

c. Are ESS programs identifying and addressing those factors that place students at risk for failure?

There are challenges in working with students placed at risk academically. A quarter of the ESS teachers who were surveyed commented that motivating students and getting students to attend ESS were hurdles they faced ("Motivating students while focusing on academic challenges"). Attendance and student motivation were challenges mentioned also by non-ESS teachers (22%), school ESS coordinators (19%), and district coordinators (12%).

The emphasis at most schools appeared to be individualized instruction, or tutoring. This type of instruction was helping students who needed extra time and assistance to master material. Students were highly appreciative of the extra attention from teachers that ESS provided. Eighty-five percent of those surveyed indicated that ESS was helping them that school year, and 39% of ESS students who were interviewed commented that the individual tutoring was helping them. The additional time to do make-up work or redo work or tests on which the student received a poor grade also were mentioned by 31% of the students who responded to the survey as the aspect they liked best about the ESS program.

Evaluation Topic Five: ESS Implementation Patterns and Outcomes

a: How does the fidelity of ESS implementation correlate with academic index scores?

As noted under evaluation question three, four distinct patterns of ESS implementation emerged from the ICCM instrument. These implementation scores were used to determine Pearson correlation values with academic index scores from the 2000-2001 Kentucky Core Content Tests (Kentucky Department of Education, 2002) for the following subjects: reading, science, mathematics, writing, social studies, arts/humanities, and practical living/vocational science. Table 4 presents correlation values of ESS implementation with each of the above subjects.

As can be seen in Table 4, correlation values between the ICCM total implementation scores and each of the school-level variables were very small, indicating a lack of relationship

between them. None was significant, which was not unexpected given the small sample size of 24 implementation scores.

b: How does the fidelity of ESS implementation correlate with school-level variables such as retention, discipline, attendance, etc.?

Again utilizing the ICCM total implementation scores, Pearson correlations were generated for a number of school-level variables, including attendance rate, retention rate, average years of teaching experience, the number of drug/weapon/assault incidents, the spending amount per student, and the number of parent volunteer hours (see Table 4). Again, these data were culled from the school report cards provided on the Internet (Kentucky Department of Education, 2002). As noted above, correlation values between the ICCM total implementation scores and each of the school-level variables were very small, indicating a lack of relationship between them. None of the correlations was statistically significant.

Table 4: ICCM Implementation Score Correlations With School Variables

School Variables	Pearson Correlation with ICCM Total Implementation Score
KCCT* Reading – Academic Index	-.044
KCCT Science – Academic Index	-.067
KCCT Mathematics – Academic Index	-.010
KCCT Writing – Academic Index	.039
KCCT Social Studies – Academic Index	-.234
KCCT Arts/Humanities – Academic Index	-.018
KCCT PL/VS – Academic Index	-.015
Average Years of Teaching Experience	.021
Number of Parent Volunteer Hours	.077
Spending Amount per Student	.233
Attendance Rate	.147
Retention Rate	-.028
Number of Drug, Weapon, or Assault Incidents	.029

*Kentucky Core Content Test

Note: ICCM scores could range from 15 to 47; the higher the score, the higher the level of ESS implementation; actual scores ranged from 24 to 45.

c. How does the fidelity of ESS implementation distinguish between schools with minimum and maximum achievement gaps?

Each of the site visit schools was identified by KDE staff as having either a minimum or maximum achievement gap in overall academic index scores between White and minority students. To determine whether the ICCM implementation score could differentiate between these two classifications, an independent *t* test was conducted. The mean ICCM implementation

score for the 13 schools classified as minimum gap was 36.54 (standard deviation of 5.25); the score for the 11 maximum gap schools was 32.45 (standard deviation of 5.97); the mean difference was 4.08. With a *t* value of 1.78, and a significance of .088, this difference approached but did not reach statistical significance at the .05 level.

d: What are the similarities and/or differences among ESS models (i.e., implementation pattern) within the classroom observations?

For the ESS classroom observations, eight-minute segments were averaged into one set of scores per observation, then aggregated and classified by school into the four patterns of ESS implementation (lowest to highest levels of implementation) as defined by the ICCM instrument. For the classroom snapshot of the observation, students were coded during a one-minute observation as being on task, off task, out of the room, or waiting. One-way analyses of variance (ANOVAs) were conducted to determine whether statistically significant differences occurred among the mean number of students in each of the activities by implementation pattern. No significant differences were found between any of the pattern groups. For the number of on-task students, means ranged from 8 to 10 across patterns (standard deviations of 3 to 4); for the other three activities, means were all below 1 (standard deviations of 0 to 1).

Then, attention was given to the target student segment of the ESS classroom observations. Again, eight-minute segments were averaged into one set of scores per observation, then were aggregated and classified by school into the four patterns of ESS implementation. The 27 individual activities that a target student could be involved in were grouped into the four main categories of teacher-led, management/organization, student-led, and off-task. One-way ANOVAs were conducted to determine whether statistically significant differences occurred among the mean number of minutes spent in each of the categories by implementation pattern. While no significant differences were found between any of the pattern groups, Figure 2 does show fluctuations across patterns.

Time spent in teacher-led activities ranged from an average of 21 minutes in Pattern 4 (highest level of ESS implementation) to 30 minutes in Pattern 3 (second highest level of implementation), with standard deviations of 3.46 and 16.44, respectively. Much less time was devoted to management/organization, as seen by a high of 5 minutes in Pattern 4 (standard deviation of 3.30) to a low of 3 minutes for the other three patterns (standard deviations ranging from 1.25 to 1.94). Time spent in student-led activities occurred most often in Pattern 4 with a mean of 25 minutes (standard deviation of 7.15), and least often for 16 minutes in Pattern 3 (standard deviation of 8.72). Finally, less time was devoted to off-task activities, with 8 minutes in Pattern 1 (lowest level of implementation, standard deviation of 7.34) and 4 minutes in Patterns 2 and 4 (standard deviations of 2.33 and 3.93).

e. What are the similarities and/or differences among ESS models (i.e., implementation pattern) within selected data measures?

The following analyses are further investigations of what factors might be underlying the four different patterns of ESS implementation. In particular, attention was given to inspecting forces that led to successful ESS implementation and barriers that hindered implementation.

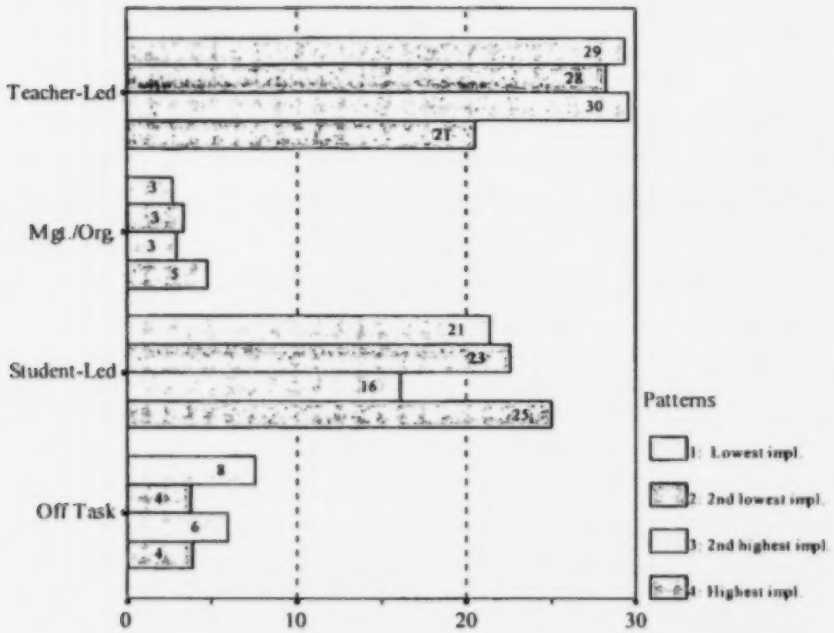

Figure 2: Observation Data: Percent of Time Spent in Main Categories by ICCM Implementation Pattern

Available data from the 24 school coordinators from the statewide survey administration were utilized for this analysis. Further, data from ESS teachers' surveys during the 24 site visits were aggregated by school and classified into four patterns of ESS implementation. The seven forces included (1) clear support or mandate from district or other political actions, (2) clear support from parents or community, (3) additional financial support, (4) excellent staff development and follow-up, (5) excellent relationships among staff, (6) outstanding administration, and (7) other.

All ESS teachers identified five of the seven forces as aiding their ESS implementation: district support, community support, financial support, staff relationships, and administration. Interestingly, district support was the only force that teachers within schools in Pattern 4 (highest level of implementation) selected more often than teachers at other schools; Pattern 4 had 50%, Pattern 1 (lowest level of implementation) had 38%. For the other four forces, ESS teachers in Pattern 1 showed higher percentages than Pattern 4 (differences of at least 25%), indicating a greater perception that these forces were prevalent in their schools. In comparison, school coordinators identified the above forces, along with staff development. Data showed two forces (district support and staff relationships) with large differences between Patterns 1 and 4 (75% difference in district support and 25% in staff relationships). Generally speaking, coordinator responses were more indicative of specific forces aiding ESS implementation than the ESS teachers. Within the 20 groupings (five forces identified by both teachers and coordinators by four patterns), 13 were 60% or more for school coordinators, compared to 7 for teachers.

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Teachers and school coordinators identified 10 problems or obstacles were encountered in their schools as they implemented their ESS programs. These obstacles included (1) problems with state or district regulations; (2) opposition or demands from key district, school, or other staff; (3) opposition or demands from parents or community; (4) problems with teacher unions; (5) inadequate financial support; (6) inadequate preparation of teachers or other school staff; (7) problematic relationships among school staff; (8) student transportation; (9) opposition or demands from students; and (10) other.

ESS teachers selected only two problems—inadequate financial support and student transportation. A fourth of teachers within Patterns 1 and 4 each selected inadequate financial support; no Pattern 2 or 3 teachers selected this problem. All teachers indicated student transportation was a problem; however, Patterns 1 and 4 were equal at 25%. In comparison, school coordinators selected four problem areas: inadequate financial support, student transportation, student opposition, and other. For Pattern 4, 100% of the coordinators indicated inadequate financial support, compared to 13% of the Pattern 1 coordinators. Similarly, more Pattern 4 coordinators indicated some other reason was causing problems (33%), compared to 13% of the Pattern 1 coordinators. For student transportation, the trend reversed, with 75% of the Pattern 1 coordinators indicating this was a problem, compared to 33% of the Pattern 4 coordinators. Similarly, more Pattern 1 coordinators indicated student opposition (50%), compared to Pattern 4 coordinators (33%). Generally speaking, school coordinators were more indicative of specific problems hindering implementation than the teachers. Within the eight groupings (two problems identified by both teachers and coordinators by four patterns), two were 60% or more for school coordinators, compared to none for teachers.

Next, data resulting from the administration of the AEL CSIQ instrument were aggregated by school and classified by ESS implementation pattern for the site visit schools to determine whether statistically significant differences in scale scores occurred between patterns. One-way ANOVAs were generated for each of the six scales by the four patterns of ESS implementation. One statistically significant difference was found in the School/Family/Community Connections scale ($F(3,20) = 3.39$, $p < .05$). Tukey's HSD was used to pinpoint which patterns differed significantly and revealed that only Pattern 4 (highest implementation level) differed from Pattern 3 (second highest implementation level). Pattern 3 had a mean score of 50.57 (standard deviation of 1.97), compared to a mean for Pattern 4 of 43.32 (standard deviation of 4.15) for a mean difference of 7.25. There is a large effect size associated with this difference (-2.23), indicating that there is not only a statistically significant difference, but also a meaningful one in a practical sense. While only one significant difference was found, Figure 3 does show slight fluctuations among all six of the scales.

Finally, Pearson correlations were generated for the six mean AEL CSIQ scale scores of the site visit schools with the ICCM total implementation score. The correlations follow: Learning Culture, .137; School/Family/Community Connections, -.070; Shared Leadership, .046; Shared Goals for Learning, .037; Purposeful Student Assessment, -.031; and Effective Teaching, .211. These correlations were all very small, indicating a lack of relationship between the scales and the implementation score. None of the correlations was statistically significant.

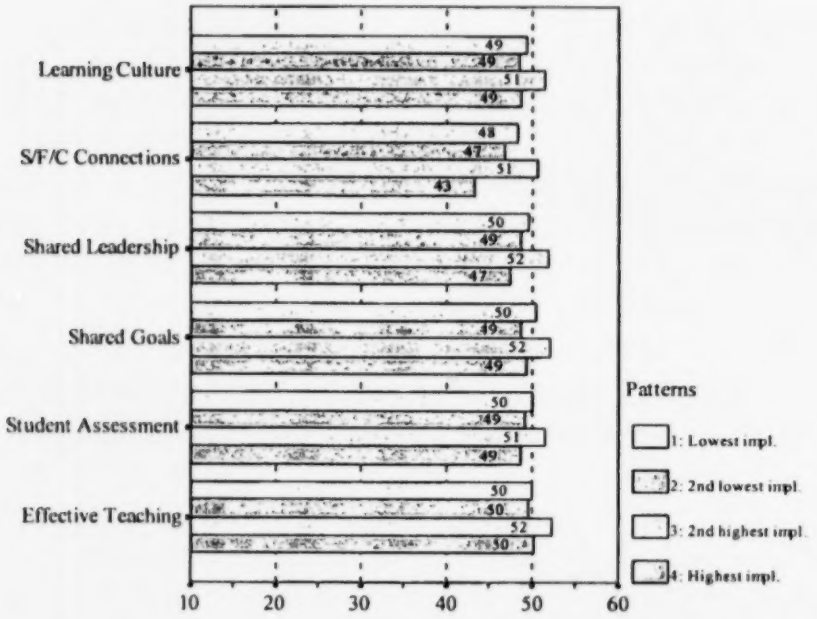

Figure 3: Mean AEL CSIQ Scale Scores by ICCM Implementation Pattern

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CONCLUSIONS

A number of conclusions can be drawn from the findings presented within this comprehensive evaluation of the statewide Kentucky Extended School Services program. These are organized by nine topical areas.

Student Demographics

- In terms of the proportion of ESS enrollment to student enrollment, ESS participation is fairly equal across elementary, middle, and high school building levels; however, participation varies widely at the individual school level.

- The participation of boys and girls in ESS is roughly equivalent, particularly at the elementary level. However, fewer females participate in the program at the middle and secondary levels. This warrants further investigation to determine whether middle and high school girls need fewer ESS services or if they are simply less interested than boys in ESS participation.

- Students attending ESS programs are characterized by coming from poorer areas (rural and inner city), which lack resources. These circumstances place students at risk of academic failure and dropping out of school.

Adherence to Intended Goals

- Generally, students are referred to ESS because they are not performing well academically and may be in danger of failing. Other reasons noted were to extend students' learning time, sustain students' current levels of performance, or improve students' self-esteem. Some students taking advantage of ESS services do so because they are in jeopardy of failing at least one class or subject. Thus the achievement of most ESS students is depressed when they first begin participating in the program.

- There is a great deal of consistency among the perceptions of coordinators, teachers, and parents as to how students are referred to ESS; the majority believe that students are referred most often by classroom teachers. However, students report that they most often self-select into the program. It may be that students are taking credit for self-selection by agreeing to participate in this voluntary program after a teacher or parent has made the suggestion. Either approach seems to allow enough flexibility for the intended population to become involved with the program.

- The students' regular teachers, ESS school coordinators, and ESS teachers most often determine individual student goals, with parents and students themselves being involved to a lesser extent. Thus students' goals appear to be heavily influenced by their teachers,

yet the majority of students adopt these goals as their own and appear to understand why they are expected to benefit from participation in the ESS program.

- There is congruence among perceptions of the intended and actual outcomes of the ESS program. All stakeholders agree that the ESS program is helping students increase their academic achievement, pass courses and grades, and decrease school failure.

- Given the main reasons for referral, and the outcomes perceived by respondents, it is evident that the ESS program is operating within its framework and addressing the main goals it is intended to accomplish.

Classroom Instruction

- ESS and regular classrooms differ on two major dimensions: quality of instruction and appropriate level of instruction. Quality of instruction is better in regular classrooms, but instructional level is more often appropriate in ESS classrooms.

- ESS classrooms tend to engage in student-led activities, often involving independent seatwork and pair seatwork. Thus a "typical" ESS classroom appears to be one in which students work independently on homework and/or make-up tests, receiving individualized instruction as needed. One strength of the ESS classroom arrangement is that students are receiving the one-on-one tutoring they need and have the opportunity to have concepts not mastered retaught to them.

- While computers are almost universally available in both ESS and regular classrooms, very limited use was made of this resource. However, the environmental checklist did not differentiate between one or multiple computers, so in classrooms with only a single computer, usage may be restricted to teacher purposes.

Student Outcomes

- The ESS program appears to be having an impact on student performance. Nearly all teachers and coordinators indicate that participation in ESS has led to increased academic achievement. Further, parents report increased understanding of subject material by their children, that their children are passing a particular subject, or that their children are now doing better in school.

- Parents and students also report improved study skills and increased motivation to learn as a result of participation in ESS. Students appreciate having opportunities to make up or retake tests. This flexibility for students who either missed a test or performed poorly on a test indicates that value is placed on allowing students the opportunity to show what they have learned.

- For many students, ESS provides a time to receive individualized instruction, to learn study skills, and to have learning reinforced through the use of games, visual aids, practice, additional time, and incentives.

Program Strengths

- The major strengths of the ESS program focus on processes for its implementation and outcomes resulting from that implementation. For instance, process-linked supports include targeting students as early as possible, dedicated staff, student transportation, collaboration between teachers and coordinators, flexible scheduling, low teacher/ student ratio, and individualized instruction.

- There is a high degree of continuity between coordinators' and teachers' beliefs about key forces that help the ESS programs to succeed. The most critical components for successful implementation are strong district- and building-level support. Other critical components for implementation success are collaboration and relationships among staff, parent or community support, staff development, and financing.

- Coordinators' responses confirm that there are numerous successful programs operating in many schools in Kentucky. One particular reason given for success was the use of innovative and creative ESS methods.

- One unique strength of the ESS program is its fluidity and flexibility. Student mobility is high throughout the program. As a particular problem arises, ESS allows for an immediate intervention that focuses on a specific need that can be addressed before it becomes chronic and long term. The program does not rely solely on the results of annual standardized test scores, which would slow down the process of identification, referral, and enrollment.

Barriers to Maximum Success

- A variety of topics are viewed both as weaknesses and as strengths, depending on their presence or absence. These include student transportation, funding, staff development, parental communication, staffing, and student motivation. This suggests that when these factors are in place and sufficient, they provide a strong foundation for successful ESS implementation. Conversely, the absence or insufficiency of these factors is detrimental to maximizing the potential of an ESS program. These issues are more fully discussed in the context of weaknesses so that administrators and policymakers can see the explanatory comments related to each.

- Student transportation is a major problem for some schools. The decision to use ESS funds to provide public transportation for students is determined by individual school and/or district policies. Because the majority of the ESS services offered during the regular school year occur after normal school hours, if bus service is not provided then

parents must make transportation arrangements for their children. With the combination of parental work schedules, a potential lack of transportation for lower-income families, and the distance involved for more rural communities, this factor could seriously deter participation of some students who might be most in need of such academic services.

- Staff development related to ESS now seems to be nonexistent, inadequate, or distributed unevenly between teachers and coordinators. This may be more problematic for newer staff members who are initially becoming involved with ESS and who are not familiar with its related philosophies and guidelines, especially since the ESS summer conference was discontinued. Further, there is some lack of agreement among school coordinators, teachers, parents, and students as to the exact intent and nature of the ESS program.

- One discrepancy noted among respondent groups involves communication, especially with parents. While ESS teachers believe they meet with parents on an as-needed basis, parents note that communication with the teacher about their children's progress is a major problem and that they often are not aware of ESS goals.

- There seems to be some degree of misunderstanding regarding the emphasis on core subjects taught in ESS sessions. District coordinators' perceptions seem to be most closely aligned with the parameters of the ESS policy and regulations.

- Most of the respondents believe that the current number of teachers involved in ESS is inadequate for the number of students. Related to this topic is the reported difficulty associated with recruiting, hiring, and retaining a sufficient number of interested teachers with appropriate content knowledge and relevant skills for working individually with students in the ESS environment.

- Student motivation is a relevant issue for encouraging participation in the ESS program. Although some students are not motivated enough to participate, those who do participate tend to become more interested and to improve their academic performance as a result. Moreover, students consider the use of alternative, "fun" instructional strategies in the ESS classrooms as more engaging.

- Finally, there is consent among the coordinators and teachers that additional funding is necessary to adequately support full implementation of the ESS program. Addressing several of the weaknesses noted above would require an increased level of funding to provide consistent student transportation, staff development, expanded services in terms of hours and/or subjects, and a reduction of the student/teacher ratio.

Program Fidelity

- The ESS programs are performing satisfactorily in terms of implementing the majority of the 15 major components of the statewide program. The following four components seem to be implemented least satisfactorily: staff selection, instructional resources, collaborative planning processes, and program evaluation.

- There are four types of implementation of ESS programs in terms of their fidelity in operating the 15 major components of the program. That is, there are four levels of implementation of the ESS program, ranging from high-fidelity implementers to low-fidelity implementers. However, these patterns of implementation are very similar across the four groups; the main differences are in the levels of implementation of each component, as opposed to the differences across the components. Three of the four high implementation schools are middle schools with small ESS programs in terms of the number of involved students and teachers. In other words, the high-fidelity implementation is more an artifact of program scale and building level rather than discrete differences in implementation.

Patterns of Implementation

- Although there seem to be no discernable operational differences in the four levels of implementation, there are some differences in associated measures when compared by implementation pattern. The high implementation group consistently spent less time on teacher-led activities and more time on student-led instructional activities than any of the remaining three groups.

- When looking at implementation patterns with other data measures utilized in this comprehensive evaluation, one other conclusion can be drawn: All the ESS school coordinators in the high implementation group pinpointed inadequate financial support.

Overall

- One of the most striking conclusions from this comprehensive evaluation of the statewide Kentucky Extended School Services program is the marked consistency and high degree of corroboration both within and among respondent perceptions and data collector observations.

- Overall, it is concluded that the ESS program is positively perceived by involved stakeholders and has been proven to help address the needs of students who are at risk academically. However, several areas have been identified in which improvements could be made for a more successful implementation of the statewide program.

RECOMMENDATIONS

Based on the findings and conclusions of the statewide Kentucky Extended School Services evaluation, a number of specific recommendations are offered for KDE staff's review and reflection.

- Some thought should be given to making scheduling adjustments to the after-school ESS programs, such as expanding hours of operation or simply staggering scheduled times within a week. The demand for additional time in ESS will need to be weighed against the possibility of further exacerbating the conflict between ESS sessions and extracurricular activities and/or part-time jobs.

- ESS staff should encourage/facilitate more involvement of parents and students in setting goals for individual students. This would help to improve communication between the home and school and to ensure that all involved parties share similar goals for individual students' learning—further increasing the likelihood that these goals will be uniformly sought, supported, and achieved. In addition, continued communication with parents about their children's progress should be a routine part of ESS program operation.

- Professional development opportunities should be provided to ESS coordinators and teaching staff in the areas of staff selection, instructional resources, collaborative planning processes, individualized instruction, mentoring/tutoring, and program evaluation. The specific format for these professional development opportunities could vary from workshop sessions at a central site or decentralized sites to online, Internet-based courses. Whatever delivery method is selected, professional development in these four areas is needed by most ESS program staff in the state.

- School-level ESS staff should carefully consider the scale of the program as they plan, deliver, and evaluate their programs to improve the level of implementation. Rather than resorting to downsizing, ESS staff need to assess how thoroughly and effectively they have implemented the 15 major program components and develop an action plan for improving those areas identified as being low or poor.

- KDE staff and state board of education members should collaborate to identify possible solutions to transportation issues. Solutions might include working closely with transportation staff, investigating alternative funding formulas such as using non-ESS monies for transportation expenses and/or seeking additional funds specifically for transportation.

- Some thought should be given to exploring ways to overcome the teacher staffing issue. For example, KDE staff could identify those districts experiencing ESS teacher recruitment problems and work with them to develop solutions. If the problem is teacher pay for ESS sessions and state or local regulations that prevent increasing teacher salaries, perhaps KDE staff could be instrumental in finding ways to overcome those barriers, such as seeking waivers for current rules or regulations.

- The possibility of developing an incentive program for ESS teachers that would generate opportunities for recognition of their efforts should be investigated. For example, an ESS Teacher of the Year award program might be designed and implemented. The idea is to offer a significant award and possibly a financial reward based on state-established criteria. The award, which could be regional or statewide, may help draw teachers previously uninterested in participating in the ESS program.

- The summer conference for ESS coordinators and teachers should be re-instituted. This conference provides an excellent opportunity for numerous professional development sessions for ESS coordinators, teachers, and staff from any district. Also, the opportunities to share ESS program information, successes, and solutions to common problems would be greater at a large conference. The added value would be that professional associations and networking about ESS across the state would likely evolve from such a conference; for example, a statewide organization of ESS professionals.

- It should be clearly communicated to all stakeholders that the ESS program, as implemented under current laws and regulations, is not designed to be an enrichment program. A clear understanding of the specific nature and purpose of the statewide program may help avoid efforts to shift its focus from struggling learners to all students.

- The current mechanism of categorical funding for the individual ESS programs should be maintained. Nearly all district and school respondents agreed this system worked well and felt that funds were distributed equitably.

- KDE and local ESS school staff should investigate ways to recruit at-risk and hard-to-reach students. Identified successful methods could be included in the best practices resource described below. Schools or districts could apply for grant money to fund focused, intensive efforts to increase students' awareness of and interest in the ESS program. Other possibilities include modifying current ESS activities to make them more fun for students by introducing creative, innovative instructional strategies to better capture students' interest, or experimenting with an incentive system to provide more extrinsic, short-term rewards to give students a sense of accomplishment during their participation in the ESS program (in addition to the intrinsic, long-term goal of increasing their academic achievement).

- KDE staff should formalize and fund the process for obtaining ESS "best practices" and develop a resource tool that would be available to all ESS staff. ESS staff in one or more districts could be financially compensated for spearheading the initiative and gathering submissions from all ESS programs. The final product could be in print or electronic format and would be a compendium of innovative and creative ESS programs. It could also include a segment on student motivation, as mentioned earlier. We understand that such an effort is currently under way, but statewide coordinators indicated limited awareness of this undertaking. Therefore, at the very least, KDE staff should increase the visibility and potential utility of such a tool for the ESS program statewide. One potential resource is the Promising Practices in Afterschool (PPAS) Web site, which provides detailed descriptions of promising practices nationwide (see www.afterschool.org).

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